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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/734,866	12/12/2003	William V. Da Palma	BOC9-2003-0096 (1082-7U)	1522
46322 7590 07/15/2009 CAREY, RODRIGUEZ, GREENBERG & PAUL, LLP STEVEN M. GREENBERG 950 PENINSULA CORPORATE CIRCLE SUITE 3020 BOCA RATON, FL 33487				
EXAMINER COLUCCI, MICHAEL C				
ART UNIT 2626		PAPER NUMBER		
MAIL DATE 07/15/2009		DELIVERY MODE PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/734,866

Applicant(s)

DA PALMA ET AL.

Examiner

MICHAEL C. COLUCCI

Art Unit

2626

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 8, 15 and 21-37 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1, 8, 15, and 21-37 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/CDC)
- Paper No(s)/Mail Date ____.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 04/27/2009 have been fully considered but they are not persuasive.

NOTE: Examiner would like to remind Applicant of the following:

"USPTO personnel are to give claims their broadest reasonable interpretation in light of the supporting disclosure. In re Morris, 127 F.3d 1048, 1054-55, 44 USPQ2d 1023,1027-28 (Fed. Cir. 1997). Limitations appearing in the specification but not recited in the claim should not be read into the claim. E-Pass Techs., Inc. v. 3Com Corp., 343 F.3d1364, 1369, 67 USPQ2d 1947, 1950 (Fed. Cir. 2003) (claims must be interpreted "in view of the specification" without importing limitations from the specification into the claims unnecessarily). In re Prater, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-551 (CCPA 1969). See also In re Zletz, 893 F.2d 319, 321-22, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989) ("During patent examination the pending claims must be interpreted as broadly as their terms reasonably allow.... The reason is simply that during patent prosecution when claims can be amended, ambiguities should be recognized, scope and breadth of language explored, and clarification imposed.... An essential purpose of patent examination is to fashion claims that are precise, clear, correct, and unambiguous. Only in this way can uncertainties of claim scope be removed, as much as possible, during the administrative process.").

Where an explicit definition is provided by the applicant for a term, that definition will control interpretation of the term as it is used in the claim. Toro Co. v. White Consolidated Industries Inc., 199 F.3d 1295, 1301, 53 USPQ2d 1065, 1069 (Fed. Cir. 1999) (meaning of words used in a claim is not construed in a "lexicographic vacuum, but in the context of the specification and drawings."). Any special meaning assigned to a term "must be sufficiently clear in the specification that any departure from common usage would be so understood by a person of experience in the field of the invention." Multifarm Desiccants Inc. v. Medzam Ltd., 133 F.3d 1473, 1477, 45 USPQ2d 1429, 1432 (Fed. Cir. 1998). See also MPEP § 2111.01."

Arguments:

(page 10 paragraph 2):

- "Applicants incorporate herein the arguments previously presented on page 2, line 14 through page 7, line 12 of the First Response dated November 26, 2008 (hereinafter the First Response), and mostly ignored by the Examiner."

(page 11 paragraph 3):

- "Referring to pages 3-6 of the Second Office Action, the Examiner's analysis refers to certain specified passages within the applied prior art without explaining why these particular passages are relevant to the

claimed limitations. Instead, the Examiner excessively relies upon the use of underlining, the purpose of which is a mystery to Applicants."

Response to arguments:

Examiner has responded to the previous arguments presented on 11/26/2008, wherein said previous arguments like the present arguments merely point out disagreements with the Examiner's grammatical structure and style of the office action. Examiner has made the best effort to find relevant arguments to the present invention, wherein arguments were in fact NOT *mostly ignored*. Further Examiner previously underlined sentences to point out the broad limitations within the claims taught by the cited references such as VXML simulation, voice interaction, user input, etc. Though given their broadest reasonable interpretation in light of the supporting disclosure, Examiner will explicitly point out the teachings of both Williams in view of Koehler that address the limitations of the present claims in view of the arguments, in an effort to resolve the *mystery of "underlining"*.

Argument

(page 11 paragraph 2):

- "As to the Examiner's reference to "nominal output," again, Applicants are unclear as to the particular point attempted to be made by the Examiner. If the Examiner is attempting to rely upon the doctrine of equivalency, the

Examiner is referred to M.P.E.P. § 2144.06. As to the Examiner's suggestion that a "nominal output" is somehow "equally effective" to text/voice in a simulated environment, the Examiner is respectfully referred to the discussion of the Graham findings of fact found within the First Response, which is the cornerstone of obviousness analysis. Specifically, the Examiner should determine the scope and content of the applied prior art with regard to the claims at issue, which involves identifying specific teachings in the applied prior art for each claimed limitation. Based upon the Examiner's analysis, Applicants are unclear is the Examiner is asserted that the claimed "nominal output" is taught by one (or both) of the references."

(page 12 paragraph 3):

- "Even assuming *arguendo* that "Williams teaches predetermined input and nominal outputs," the claimed invention recites "processing the user simulation script to generate both a simulated output for the voice application corresponding to the nominal output and a simulated input for the voice application corresponding to a pre-determined user input to the voice application." Thus, the teaching of predetermined input and nominal outputs is not enough. Instead, a user simulation script must be processed to generate both (i) "a simulated output for the voice application corresponding to the nominal output" and (ii) "a simulated input for the

voice application corresponding to a pre-determined user input." These teachings, however, are not found in the applied prior art"

Response to arguments:

As previously cited (01/27/2009), Examiner has clearly cited the use of the term *nominal* (present invention [0021]), wherein the specification directly recites that "in the simulation environment of the present invention, all such Outputs are text based, and are initially "nominal" outputs: the outputs that the voice application would otherwise provide to a user in the non-simulated environment". The use of nominal to one skilled in the art is rather ambiguous (i.e. a "name", real or nominal, grammar – noun,), and thus Examiner looks to the specification for a better understanding of the use of nominal with respect to the present invention. Examiner has incorporated Koehler to address the ambiguous use of nominal, where Koehler teaches nominal outputs, i.e. "outputs that the voice application would otherwise provide to a user in the non-simulated environment", (i.e. real-time or actual outputs) wherein Koehler teaches a simulation and administration module (Fig. 2). These disclosed modules output simulated and administrative data (i.e. data seen by a user in a non-simulated mode. Aside, from the interpretation that a "non-simulated environment" refers to an administrative or programmer perspective, Koehler also teaches simulated and actual operations of a voice application.

Koehler teaches actual and simulated data outputs, wherein Koehler teaches that simulator module 230 creates a realistic training environment in two

respects. First, through the business rules application 232, the simulator module 230 initiates a real-time, spoken conversation and the software emulation 238 of the simulator module 230 is programmed to mimic the software actually running a customer service center for which the trainee is training. For example, the screenshots, caller data format, options, keyboard configuration and the like are identical to that of the actual call center, so the trainee is trained on system operation at the same time the trainee is learning to communicate with customers (Koehler [0044]).

Further, Koehler demonstrates examples of both simulated and actual outputs in a voice application, wherein the use of a "nominal" output is addressed in an example, wherein Koehler teaches regional database may also include customer data, which likewise populates the software emulation 238, so that the trainee receives "pop-up" caller data during simulated calls, as would be the case in an actual call center interaction. The customer data includes, for example, the customer name, address, account balance, current product/service information and the like. The customer data may also be updated by a web interface. (Koehler [0049]).

Furthermore, Koehler teaches that in response to the scenario initiation, the business rules application 232 receives input from the trainee at step s324. The trainee's input includes speaking into the headset microphone or, alternatively, typing on a keyboard interfaced with the trainee terminal 130. Note that the initial dialog segment of the scenario includes an incoming customer call

and the trainee's response, e.g., answering the call and greeting the customer. For example, the software emulation 238 may provide an indication of a queued call that mimics the same indication received by an agent at the actual call center, such as a beeping call initiation sound, indicating that the scenario is ready. The trainee receives the call (e.g., by a particular keystroke, as provided by the software emulation 238) and responds with a greeting (Koehler [0061]).

Additionally, Koehler teaches a scenario in the form of a script used in the simulation of a voice interaction to provide an actual representation of a real time voice interaction (Koehler [0072])

It is therefore obvious to modify the system of Williams to incorporate generating both a simulated output for the voice application corresponding to the nominal output and a simulated input deriving from the voice application a nominal output of the voice application to allow for the mimicking or simulation of an interaction taking place within a call center (Koehler [0061]), wherein the teachings Koehler can easily be applied to that of Williams to provide simulated output (e.g. pop-up or text) that would be actual output (e.g. audio) during a real-time call (Koehler [0049]).

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 8, 15, and 21-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Williams et al. US 20030212561 A1 (hereinafter Williams) in view of Koehler et al. US 20030156706 A1 (hereinafter Koehler).

Re claims 1, 8, and 15, Williams teaches a method for simulating ([0034]) a run-time user interaction with a voice application ([0047] & Fig. 6), said method comprising the steps of:

loading a user simulation script programmed to specify simulated voice interactions with the voice application ([0047] & Fig. 6);

processing the user simulation script ([0034]) to generate both a simulated output for the voice application corresponding to the nominal output and a simulated input for the voice application corresponding to a pre-determined user input ([0048]) to the voice application ([0047] & Fig. 6), wherein

the step of processing further comprises simulating a text equivalent and an execution time for each of the nominal output and the pre-determined user input ([0049] & [0053]), and further comprising the steps of:

However, Williams fails to teach deriving from the voice application a nominal output of the voice application

processing the user simulation script to generate both a simulated output for the voice application corresponding to the nominal output and a simulated input deriving from the voice application a nominal output of the voice application

Koehler teaches actual and simulated data outputs, wherein Koehler teaches that simulator module 230 creates a realistic training environment in two respects. First, through the business rules application 232, the simulator module 230 initiates a real-time, spoken conversation and the software emulation 238 of the simulator module 230 is programmed to mimic the software actually running a customer service center for which the trainee is training. For example, the screenshots, caller data format, options, keyboard configuration and the like are identical to that of the actual call center, so the trainee is trained on system operation at the same time the trainee is learning to communicate with customers (Koehler [0044]).

Further, Koehler demonstrates examples of both simulated and actual outputs in a voice application, wherein the use of a "nominal" output is addressed in an example, wherein Koehler teaches regional database may also include customer data, which likewise populates the software emulation 238, so that the trainee receives "pop-up" caller data during simulated calls, as would be the case in an actual call center interaction. The customer data includes, for example, the customer name, address, account balance, current product/service information and the like. The customer data may also be updated by a web interface. (Koehler [0049]).

Furthermore, Koehler teaches that in response to the scenario initiation, the business rules application 232 receives input from the trainee at step s324. The

trainee's input includes speaking into the headset microphone or, alternatively, typing on a keyboard interfaced with the trainee terminal 130. Note that the initial dialog segment of the scenario includes an incoming customer call and the trainee's response, e.g., answering the call and greeting the customer. For example, the software emulation 238 may provide an indication of a queued call that mimics the same indication received by an agent at the actual call center, such as a beeping call initiation sound, indicating that the scenario is ready. The trainee receives the call (e.g., by a particular keystroke, as provided by the software emulation 238) and responds with a greeting (Koehler [0061]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Williams to incorporate deriving from the voice application a nominal output of the voice application and processing the user simulation script to generate both a simulated output for the voice application corresponding to the nominal output and a simulated input deriving from the voice application a nominal output of the voice application as taught by Koehler to allow for the mimicking or simulation of an interaction taking place within a call center (Koehler [0061]), wherein the teachings Koehler can easily be applied to that of Williams to provide simulated output (e.g. pop-up or text) that would be actual output (e.g. audio) during a real-time call (Koehler [0049]).

Re claims 21, 27, and 33, Williams teaches the method of claim 1, wherein the user simulation script is specified in a customized mark-up language (well known

teachings [0010], user interface allows a user to graphically create a voice application, Fig. 4A, Fig. 8 test script generation).

Re claims 22, 28, and 34, Williams teaches the method of claim 1, wherein the step of processing further comprises simulating a text equivalent ([0050]) and an execution time for each of the nominal output and the pre-determined user input.

However, Williams fails to teach an execution time for each of the nominal output and the pre-determined user input

Koehler teaches pre-determined time intervals contained text/speech segments that are to be outputted, wherein predetermined time intervals, a voice simulator operating with the simulator module 230 checks the processing queue table for new entries. When a new entry is identified, the voice simulator sends the phrase to a text-to-speech application to transform the text data into audio files (Koehler [0058]).

Koehler also teaches the identification of elapsed time used by an agent (i.e. agent in training), wherein the elapsed time 518 used to execute the dialog segment and the total coaching time 519 provided to the trainee (Koehler [0075] & Fig. 5, 518, dialog time).

Additionally, Koehler teaches actual and simulated data outputs, wherein Koehler teaches that simulator module 230 creates a realistic training environment in two respects. First, through the business rules application 232, the simulator module 230 initiates a real-time, spoken conversation and the software emulation 238 of the

simulator module 230 is programmed to mimic the software actually running a customer service center for which the trainee is training. For example, the screenshots, caller data format, options, keyboard configuration and the like are identical to that of the actual call center, so the trainee is trained on system operation at the same time the trainee is learning to communicate with customers (Koehler [0044]).

Further, Koehler demonstrates examples of both simulated and actual outputs in a voice application, wherein the use of a "nominal" output is addressed in an example, wherein Koehler teaches regional database may also include customer data, which likewise populates the software emulation 238, so that the trainee receives "pop-up" caller data during simulated calls, as would be the case in an actual call center interaction. The customer data includes, for example, the customer name, address, account balance, current product/service information and the like. The customer data may also be updated by a web interface. (Koehler [0049]).

Furthermore, Koehler teaches that in response to the scenario initiation, the business rules application 232 receives input from the trainee at step s324. The trainee's input includes speaking into the headset microphone or, alternatively, typing on a keyboard interfaced with the trainee terminal 130. Note that the initial dialog segment of the scenario includes an incoming customer call and the trainee's response, e.g., answering the call and greeting the customer. For example, the software emulation 238 may provide an indication of a queued call that mimics the same indication received by an agent at the actual call center, such as a beeping call initiation sound, indicating that

the scenario is ready. The trainee receives the call (e.g., by a particular keystroke, as provided by the software emulation 238) and responds with a greeting (Koehler [0061]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Williams to incorporate an execution time for each of the nominal output and the pre-determined user input as taught by Koehler to allow for the mimicking or simulation of an interaction taking place within a call center (Koehler [0061]), wherein pre-determined time segments of speech/text can be output (Koehler [0058]) to allow for the logging of a duration of a voice interaction (Koehler [0075] & Fig. 5, 518, dialog time)

Re claims 23, 29, and 35, Williams teaches the method of claim 1, wherein the simulated output simulates an output from a text to speech engine in response to the simulated input ([0050], & [0016] well known uses of TTS and speech recognition).

Re claims 24, 30, and 36, Williams teaches the method of claim 1, wherein the simulated output simulates an output from an automatic speech recognition engine in response to the simulated input ([0050], & [0016] well known uses of TTS and speech recognition).

Re claims 25, 31, and 37, Williams teaches the method of claim 1, wherein the simulated output simulates a pre-recorded audio source ([0049]).

Re claims 26 and 32, Williams teaches the method of claim 1, further comprising the steps of: a) deriving additional nominal outputs of the voice application;

b) processing the user simulation script to ([0034]) generate additional simulated outputs ([0071]) for the voice application corresponding to the additional nominal outputs ([0047] & Fig. 6);

c) processing the user simulation script to generate additional simulated inputs to the voice application ([0045]-[0047]); and

d) repeating steps a), b) and c) until the user simulation script is exhausted to simulate a complete set of user interactions with the voice application ([0050] & Fig. 6), in response to and as input for a complete set of user prompts from the voice application ([0066]-[0068]).

However, Williams fails to teach a) deriving additional nominal outputs of the voice application;

Koehler teaches actual and simulated data outputs, wherein Koehler teaches that simulator module 230 creates a realistic training environment in two respects. First, through the business rules application 232, the simulator module 230 initiates a real-time, spoken conversation and the software emulation 238 of the simulator module 230 is programmed to mimic the software actually running a customer service center for which the trainee is training. For example, the screenshots, caller data format, options, keyboard configuration and the like are identical to that of the actual call center, so the

trainee is trained on system operation at the same time the trainee is learning to communicate with customers (Koehler [0044]).

Further, Koehler demonstrates examples of both simulated and actual outputs in a voice application, wherein the use of a "nominal" output is addressed in an example, wherein Koehler teaches regional database may also include customer data, which likewise populates the software emulation 238, so that the trainee receives "pop-up" caller data during simulated calls, as would be the case in an actual call center interaction. The customer data includes, for example, the customer name, address, account balance, current product/service information and the like. The customer data may also be updated by a web interface. (Koehler [0049]).

Furthermore, Koehler teaches that in response to the scenario initiation, the business rules application 232 receives input from the trainee at step s324. The trainee's input includes speaking into the headset microphone or, alternatively, typing on a keyboard interfaced with the trainee terminal 130. Note that the initial dialog segment of the scenario includes an incoming customer call and the trainee's response, e.g., answering the call and greeting the customer. For example, the software emulation 238 may provide an indication of a queued call that mimics the same indication received by an agent at the actual call center, such as a beeping call initiation sound, indicating that the scenario is ready. The trainee receives the call (e.g., by a particular keystroke, as provided by the software emulation 238) and responds with a greeting (Koehler [0061]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Williams to incorporate deriving additional

nominal outputs of the voice application as taught by Koehler to allow for the mimicking or simulation of an interaction taking place within a call center (Koehler [0061]), wherein the teachings Koehler can easily be applied to that of Williams to provide simulated output (e.g. pop-up or text) that would be actual output (e.g. audio) during a real-time call (Koehler [0049]).

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael C. Colucci whose telephone number is (571)-

270-1847. The examiner can normally be reached on 9:30 am - 6:00 pm, Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil can be reached on (571)-272-7602. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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